



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,783	04/04/2001	Takahisa Shirakawa	DP-749US	2975
30743 7590 12/13/2007 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			EXAMINER ANDRAMUNO, FRANKLIN S	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/824,783

Applicant(s)

SHIRAKAWA, TAKAHISA

Examiner

Franklin S. Andramuno

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09/28/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 is/are allowed.
- 6) ☒ Claim(s) 23-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 09/28/07 have been fully considered but they are not persuasive. The added reference Schulhof, includes the limitations of independent claims 23-24 and 27-30. The system rebroadcast the popular program to specific clients (column 11 lines 35-37).

### ***Allowable Subject Matter***

1. Claims 1-22 are allowed.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picco et al (Patent Number 6,029,045) in view of Marko et al (US 2007/0124794 A1) in view of Schulhof et al (Patent Number 5,572,442). Hereinafter referred as Picco, Marko and Schulhof.

Regarding claims 23-24, Picco discloses a broadcasting service system and a delay broadcasting method comprising: a broadcast station (**Uplink (102) in figure 7**) for broadcasting program contents (**Life Feeds (106) and Added Content (108) in figure 7**); at least one audiovisual system for generating a request for viewing the program content for selectively viewing a broadcast advertisement content, and for viewing a rebroadcast program content (**Audio (190) in figure 7**); and a repeater station for storing the program contents broadcasted by the broadcast station and for conditionally rebroadcasting the stored program contents (**Store Piece of Local Content on Disk (238) in figure 9**) to at least one audiovisual system making a request for viewing the program contents in response to at least one audiovisual system generating the request to view the program contents (**Audio Splicer (190) in figure 8**), wherein the repeater station conditional rebroadcasting includes connecting at least one audiovisual system in response to its generated request for viewing the program content, (**Motion compensation involves using predictive methods to reduce temporal redundancies [column 2 lines 14-17]**) wherein the repeater station conditional rebroadcasting includes generating a prediction of whether or not a predetermined target advertisement effect can be attained within a broadcasting time of

the program contents under a condition that a broadcasting of a given advertising contents is inserted during a rebroadcasting of the requested by the audiovisual systems connected to the repeater station (**The operator of the satellite-based system (30) may insert content, such as advertisements into the satellite signal [column 5 lines 19-21]**), and wherein the repeater station conditional rebroadcasting includes connecting at least one audiovisual system in response to its generated request for viewing the program contents (**Audio, Video, Graphic in figure 7**), wherein the repeater station conditional rebroadcasting includes generating a prediction whether or not a predetermined target advertisement effect can be attained within a broadcasting time of the program content under a condition that a broadcasting of a given advertisement contents is inserted during a rebroadcasting of the program content requested by the connected audiovisual systems to the connected audiovisual systems connected to the repeater station (**Live Feeds (106) in figure 5**), and wherein the repeater station conditional rebroadcasting includes rebroadcasting the program content requested by the connected audiovisual systems to the connected audiovisual systems while inserting the broadcasting of the advertisement contents during the rebroadcasting of the program contents if the prediction indicates that the predetermined target advertisement effect can be attained (**The system may also generate statistics about the user of the system and then sell local content space to advertisers based on these statistics [column 14 lines 55-57]**) and wherein the repeater station conditional rebroadcasting includes not rebroadcasting the program contents requested by the connected audiovisual systems to the connected audiovisual

systems if the prediction indicates that the predetermined target advertisement effect cannot be attained. **However, Picco fails to teach** that a program is rebroadcasted based on popularity. Schulhof discloses in column 11 lines 16-20 that popular program can be rebroadcasted based on demand.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Picco's reference to include a repeater station to rebroadcast program content. This is a useful combination because a repeater station is needed for distributing and storing local programming content in different geographical regions.

Regarding claims 27-30, Picco discloses a broadcasting service system and a delay broadcasting method comprising: a broadcast station (**Uplink (102) in figure 7**) for broadcasting program contents (**Life Feeds (106) and Added Content (108) in figure 7**); at least one audiovisual system for generating a request for viewing the program content, for selectively viewing a broadcast advertisement content, and for viewing a rebroadcast program content; (**Audio (190) in figure 7**); and a station for storing the program contents broadcasted by the broadcast station and for conditionally rebroadcasting the stored program contents (**Store Piece of Local Content on Disk (238) in figure 9**) to at least one audiovisual system making a request for viewing the program contents in response to at least one audiovisual system generating the requests to view the program contents (**Audio Aplicer (190) in figure 8**), wherein the repeater station conditional rebroadcasting includes connecting audiovisual systems in response to its generated request for viewing the program content, and broadcasting

the advertisement content to the connected audiovisual system (**The invention permits a broadcaster to segment its viewers for advertisers [column 2 lines 59-61]**), wherein the repeater station conditional rebroadcasting further includes detecting the number of the connected audiovisual systems viewing the advertisement content and generating an advertisement effect measurement based on the detected number and a broadcasting time of the advertisement contents (**The agent (150), based o the statistics, may output the statistics or use the statistics to entire new advertisers to provide local content [column 7 lines 23-26]**), and wherein the repeater station conditional rebroadcasting further includes comparing the advertising effect measurement to a predetermined target advertisement effects and, if the advertising measurement meets the predetermined target advertising effect (**column 7 lines 6-9**), to rebroadcast the stored program content to the connected audiovisual systems, and, if the advertisement effect measurement fails to meet the predetermined target advertisement effect, to not rebroadcast the stored program content to the connected audiovisual systems (**The system may also generate statistics about the user of the system and then sell local content space to advertisers based on these statistics [column 14 lines 55-57]**). However, Picco doesn't teach the use of repeater station to rebroadcast program contents. Marko discloses **that one or more terrestrial repeaters (17) can be provided to repeat satellite signals [page 2 paragraph. (0020) lines 7-9]**.

Regarding claims 25-26, Picco discloses the delay broadcasting method of claim 23-24, further comprising the steps of: calculating the expected waiting time on the

basis of the measured result of the advertisement effect until the rebroadcasting of the program contents is started (**column 7 lines 6-9**); and broadcasting the combination of the advertisement contents and the expected waiting time on the broadcasting screen from the repeater system to the audiovisual systems connected to the repeater system (**Figure 6 a graph of programming data with respect to time reflects the expected waiting time for broadcasting**).

Regarding claims 33-36, Picco discloses the delay broadcasting method of claim 27-30, wherein the repeater station receives a plurality of programs of program contents broadcasted by the broadcast station, further comprising: calculating an advertisement effect of each program of the program contents (**column 7 lines 6-9**) on the basis of a number of the audiovisual systems each making a request for viewing each program of the program contents (**Audio, Video, and Graphics in figure 7**); calculating a recording cost for recording each program of the program contents; calculating a proper recording time of each program of the program contents on the basis of the calculated advertisement effect and the calculated recording cost (**Store piece of local content on disk (238) in figure 9**); predicting the program contents which permit to obtain the advertisement effects more than their recording costs on the basis of their calculated proper recording times; and storing selectively only the program contents predicted that the program contents permit to obtain the advertisement effects more than their recording costs (**column 2 lines 59-67**).

Regarding claims 31-32, Picco discloses the broadcasting service system and a delay broadcasting method of claim 1, wherein the broadcasting station is for



broadcasting a plurality of program contents; wherein the repeater station conditional rebroadcasting further includes receiving the plurality of program contents (**Program Guide (154) in figure 5**) broadcasted by the broadcast station, wherein the repeater station conditional rebroadcasting further includes calculating an advertisement effect of each of the program contents on the basis of a number of the audiovisual systems generating a request for viewing each of said plurality of the program contents (**The system may also generate statistics about the user of the system and then sell local content space to advertisers based on these statistics [column 14 lines 55-57]**), wherein the repeater station conditional rebroadcasting further includes calculating a recording cost for recording each of the program contents, wherein the repeater station conditional rebroadcasting further includes calculating a proper recording time of each program of the program contents based on the calculated advertisement effect and the calculated recording cost (**The set-top box may use these coefficients to determine which pieces of local content are going to be stored by each particular set-top box [column 8 lines 7-10]**), wherein the repeater station conditional rebroadcasting further includes generating a prediction indicating which from among the program contents will have advertisement effects exceeding their recording costs on the basis of their calculated proper recording times (**The content profile may also include a distribution variable which determines which users of the system may be downloaded [column 7 lines 56-60]**), and wherein the repeater station conditional rebroadcasting further includes selectively storing only the program contents for which the generated prediction indicates advertisement effects exceeding their recording costs

**(The advertisers benefit since they are able to more effectively reach viewers who are more likely to be interested in their product often at a lower total cost since the advertiser does not have to purchase the rights to advertise in the entire market [column 2 lines 63-67]).**

Regarding claim 37, Picco discloses an advertisement method used the broadcasting service system **(The invention permits a broadcaster to segment its viewers for advertisers [column 2 lines 59-61])** claimed in any of one of claims 1 to 22.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Franklin S. Andramuno whose telephone number is 571-270-3004. The examiner can normally be reached on Mon-Thurs (7:30am - 5:00pm) alternate Fri off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571)272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
09/824,783  
Art Unit: 2623

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600